

An increasingly competitive business environment compels companies to examine the long-term costs of production and distribution, and to focus on regional differences in the net cost of doing business. Among the more significant factors having a direct influence on bottom-line costs is the annual capital that must be committed to utility consumption.

Kentucky enjoys a tremendous competitive advantage in the provision of energy, natural gas, and water supply. The state's large coal reserves and their resulting proximity to coal-burning utility plants, its direct location on the interstate natural gas pipeline corridor, and an abundant natural water supply derived from an extensive network of rivers, streams, and lakes, keep Kentucky's utility costs among the very lowest in the nation. In turn, a large number of utility providers, and oversight by the Kentucky Public Service Commission (PSC) continue to ensure competitive rates for the consumer. Average annual utility costs and tariff rates for individual providers are available at the PSC.

Electric Power

Kentucky's electric power cost, in the industrial sector, has ranked the lowest in the nation for three consecutive years.

ELECTRIC POWER COST CENTS PER KILOWATTHOUR

STATE	INDUSTRIAL	COMMERCIAL	RESIDENTIAL	ALL SECTORS
KENTUCKY	3.09	5.30	5.65	4.26
Alabama	3.82	6.63	7.12	5.71
Arkansas	4.01	5.68	7.25	5.61
Georgia	3.95	6.46	7.63	6.39
Illinois	5.01	7.49	8.39	6.24
Indiana	3.95	5.98	6.91	6.97
Michigan	4.95	7.36	8.28	6.92
Mississippi	4.40	6.83	7.28	6.24
Missouri	4.42	5.88	7.06	6.09
N. Carolina	4.70	6.51	8.19	6.74
Ohio	4.68	7.68	8.29	6.66
S. Carolina	3.85	6.48	7.72	5.83
Tennessee	4.15	6.45	6.41	5.72
Virginia	4.13	5.87	7.79	6.23
W. Virginia	3.81	5.41	6.23	5.11
UNITED STATES	4.88	7.86	8.46	7.21

Source: Energy Information Administration/Electric Power Annual 2002 - Figures 7.4 to 7.7.



Power costs in Kentucky vary with the demand load, power usage, service equipment provided, and the distributor providing the services. Cost estimates for specific locations in Kentucky can be provided by the Kentucky Cabinet for Economic Development, upon receipt of detailed electric power requirement figures.

Investor owned electric companies and non-TVA rural electric cooperatives are regulated by the Kentucky Public Service Commission (PSC), including approval of rate schedules. These power distributors are allowed to negotiate lower economic incentive rate contracts with large industrial and commercial customers, subject to approval by the Kentucky PSC. Significant discount rates can be granted for up to five years for both new and expanding operations.

The Kentucky state sales tax (6.0% rate) applies to electric services for non-residential use. State statutes exempt from the sales tax and utility gross receipts license tax all electric services in excess of 3.0% of the costs of production annually for a manufacturer.

Electric power in Kentucky is distributed by five investor owned electric utilities, approximately thirty municipal electric systems, twenty-one rural electric cooperatives, and the Tennessee Valley Authority. The investor owned utilities, which account for fifty percent of all sales in the state, are:

<u>American Electric Power</u>, Ashland, KY, which serves all or parts of 20 counties along the eastern edge of the state.

<u>Kentucky Utilities Company</u>, Lexington, KY, which serves cities and rural areas across Kentucky in 77 of the state's 120 counties. Kentucky Utilities Company is a subsidiary of LG&E Energy Corporation.

<u>Louisville Gas and Electric Co.</u>, Louisville, KY, which serves metropolitan Louisville and areas in eight adjoining Kentucky counties. Louisville Gas and Electric Company is a subsidiary of LG&E Energy Corporation

<u>Union Light, Heat and Power Co.</u>, Covington, KY. (Subsidiary of the Cincinnati Gas and Electric Co.) which serves portions of five counties in Northern Kentucky, immediately south of Cincinnati, Ohio.

Berea College, Electric Utility Department which serves Berea and parts of Madison County.

Electric Energy, Inc. also provides electric power, serving a single industrial customer.

Approximately ninety percent of Kentucky's electric power is produced by coal-fired power plants, with the balance generated by hydroelectric dams, fuel oil, and natural gas. Kentucky's large reserves of unmined coal ensure abundant supplies of electric power for the foreseeable future.



Natural Gas

Natural gas in Kentucky is available from thirty-five gas distribution companies, thirty-five intrastate pipeline gas companies, 162 municipal, college, or housing authority providers, and one gas and water district operated locally at the county level. Total consumption of natural gas in Kentucky equaled 226 billion cubic feet (2002). The large majority of this volume is obtained from the interstate pipeline system between the Gulf states and the Northeast, which passes directly through Kentucky, thus ensuring a competitive and readily available supply of natural gas. The remainder of the natural gas consumed in the state is produced by wells in the Eastern and Western Kentucky coalfields and in the South central part of the state.

Kentucky's natural gas costs, in the industrial and commercial sectors, are quite competitive, particularly within the Midwest and Southeast regions of the nation.

The costs of natural gas vary across Kentucky, depending upon the source of the gas, the local distributor, the volume of gas used, and the type of service contracts (eg. firm vs interruptible service). All gas distribution and intrastate gas transmission companies in Kentucky, except municipal systems, are regulated by the Kentucky Public Service Commission (PSC), including approval of rates charged to customers.

Regulated gas companies can offer economic incentive rates for certain large industrial and commercial customers for up to five years, for both new and expanding operations. Gas companies also can offer a discount or waiver of gas main extension costs. The specific discount terms for individual customers are set by contracts negotiated with the gas companies, subject to approval by the PSC.

Industries consistently using large quantities of natural gas may negotiate for transport gas service at costs substantially below normal gas service costs. The company buys gas from the producer through contracts with the local gas distributor. The minimum level of usage required for transport gas service varies with the gas distributor.

The Kentucky state sales tax (6.0% rate) applies to gas services for non-residential use. State statutes exempt from the sales tax and utility gross receipts license tax all gas costs used in the course of manufacturing in excess of 3.0% of the costs of production annually for a manufacturer.

Water

An extensive surface water network of rivers, streams, and lakes, complemented by ground water supplies that are very pronounced in certain regions of the state, guarantee an ample supply of water for industrial and commercial use. Treated water is distributed in Kentucky communities by thirteen investor owned water companies, twenty-two water associations, one



hundred twenty-three water districts, and eighty-seven municipal water utilities. The types of services and rates charged by water districts, water associations, and investor owned water companies are regulated by the Kentucky Public Service Commission.

Many industries in the state withdraw water directly from Kentucky's extensive network of major rivers, manmade lakes, and ground water supplies. Concentrations of chemical and primary metals industries and electric power plants have developed in Kentucky along the Ohio River to profit from the abundant supplies of surface and ground water and from lower cost barge transportation. Industries withdrawing over 10,000 gallons of water daily from surface or ground water sources must obtain a permit from the Kentucky <u>Department for Environmental Protection</u>.

The cost of commercial and industrial water use in Kentucky generally ranges between \$ 1.80 and \$ 4.00 per 1000 gallons. Costs charged by specific providers are available from the PSC Tariff Library.

The Kentucky state sales tax (6.0%) applies to water consumption for non-residential use.

Sewer

Nearly ninety municipally operated sewer systems and over eighty sewer utilities provide wastewater and sewerage treatment services in Kentucky. Municipal sewer services are available to most industrial areas of the state, except for sites in underdeveloped or remote areas. Some industrial effluents may require pretreatment before discharge into sewer systems.

Privately operated wastewater treatment plants may be approved by Kentucky's Department for Environmental Protection agency for industries not having access to a municipal sewer system. Generally, package plants can be allowed only when the treated effluent will be discharged into a stream with continuous flow all year long. Such streams are shown as "blue line" streams on official U.S. Geological Survey 7.5 minute topographic maps.

Construction permits for package wastewater plants must be obtained from the Kentucky Department for Environmental Protection before construction begins. The Department administers the national pollution discharge elimination system (NPDES) in Kentucky, under authority granted by the U.S. EPA. A single application to the Department serves for both state and federal approvals.



For one-stop information and details on application for environmental permits contact:

Department for Environmental Protection Commissioner's Office Karen Wilson 14 Reilly Road Frankfort, Kentucky 40601 Telephone: (502) 564-2150

Fax: (502) 564-4245

The costs of sewer services vary by provider, but frequently parallel the local costs of water service.

The Kentucky state sales tax (6.0%) rate applies to sewer services for non-residential use.

Telecommunications

Kentucky is served by one of the most extensive telecommunications networks in the country, providing an important link to information-intensive businesses around the world. Fiber optic, wireless radio, digital microwave, and satellite technologies are integrated into a sophisticated infrastructure capable of handling the most demanding needs. Digital deployment now stands at 100 percent. Full statewide deployment of ATM and Frame Relay networks has been completed. This technology provides the flexible bandwidth required for high-speed transport of voice, data, image, and video simultaneously. Kentucky's cutting edge technology opens a world of opportunities for any business with telecommunications needs.

Kentucky has taken dramatic steps forward in the development of its telecommunications infrastructure into a statewide communications and information network known as the Kentucky Information Highway. A partnership between the Commonwealth of Kentucky, BellSouth, Qwest and local exchange carriers, the Kentucky Information Highway is a digital network that provides for high-speed, high capacity delivery of voice, data, and video images.

The <u>Information Technology Resource Center (iTRC)</u> located in Louisville, Kentucky, is focused on providing Information Age entrepreneurial support to Kentucky small businesses. The iTRC is owned and managed by the University of Louisville's College of Business and Public Administration.

The iTRC has a strategic alliance with BellSouth, the largest Regional Bell Holding Company. BellSouth provides technical support to incubating companies, R&D assistance, and small business entrepreneurial services with their Small Business Resource Center in cooperation with the Small Business Administration.

The University of Kentucky's Alliance for Networking Excellence supports research of



evolving network and communications systems. UK has been actively involved in Internet II and is a regional partner in the National Science Foundation's Partnerships for Advanced Computational Infrastructure.

Facilities are located throughout Kentucky which provide video and teleconferencing opportunities for businesses. These facilities include Kentucky Educational Television in Lexington, the Rural Development Center in Somerset, and the Madisonville Technology/Economic Development Center. Many of the state's community and technical colleges also provide facilities for video and teleconferencing.

Kentucky is fully served by twenty local exchange telephone companies, including ALLTEL, Cincinnati Bell, and BellSouth, as well as by sixteen cellular telephone companies, and sixteen personal communications service (pcs) companies.

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